

Claims

1. A method for manufacturing semichemical pulp from cornstalks comprising:

(1) a pretreatment process of cutting
5 cornstalks to a size of 1 cm × 1 cm to 5 cm × 5 cm; and

(2) a refining process of refining the pretreated cornstalks with 0.05-15 wt% of caustic soda (a steaming solution), based on the total weight of the cornstalks, at 25-85 °C and at normal pressure or a
10 pressure of 3-10 kg/cm².

2. A method for manufacturing semichemical pulp from cornstalks comprising:

(1) a pretreatment process of cutting
15 cornstalks to a size of 1 cm × 1 cm to 5 cm × 5 cm; and

(2) a refining process of refining the pretreated cornstalks with 0.5-10 wt% of sodium sulfite or sodium bisulfite (a steaming solution), based on the total

weight of the cornstalks, at 25-85 °C and at normal pressure or a pressure of 3-10 kg/cm².

3. A method for manufacturing semichemical pulp from
5 cornstalks comprising:

(1) a pretreatment process of cutting cornstalks to a size of 1 cm × 1 cm to 5 cm × 5 cm;

(2) a chemical treatment process of adding a mixture solution of 0.05-3.0 wt% of caustic soda and 0.2-5
10 wt% of sodium sulfite, based on the total weight of the cornstalks, to the pretreated cornstalks and applying heat and pressure in the range of 25-45 °C and 3-10 kg/cm²;

(3) a first refining process of defibrating the chemical-treated cornstalks with a refiner; and

15 (4) a second refining process of adding 5-20 wt% of hydrogen peroxide and 7-30 wt% of sodium silicate, based on the total weight of the cornstalks, to the cornstalks to refine and bleach them.

4. The method of claim 1 further comprising a heat treatment process of heating the cornstalks to 50-80 °C after (1) the pretreatment process.